

July 2015

Labette County

Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 16 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Labette County economy.¹ These 16 sectors have a total direct output of approximately \$209 million and support 1,122.4 jobs in Labette County. Running the model for all 16 sectors simultaneously produces the following results:

Agriculture Contribution in Labette County

		0				
				% of Gross		% of Gross
		% of Total	Total	Regional		Regional
Impact Type ²	Employment	Employment	Value Added ³	Product ⁴	Output ⁵	Product
Direct Effect	1,122.4	8%	\$81,015,835	9%	\$209,013,573	24%
Indirect Effect	235.4	2%	\$16,670,458	2%	\$30,631,360	4%
Induced Effect	140.2	1%	\$9,502,402	1%	\$16,181,881	2%
Total Effect	1,498.0	11%	\$107,188,696	12%	\$255,826,815	29%

As shown in the above table, agriculture, food, and food processing supports 1,498.0 jobs, or 11% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$256 million, roughly 29% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 16 agriculture, food, and food processing sectors is approximately \$107 million, or 12% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 12% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

¹ Article on building a contribution analysis in IMPLAN that avoids double counting: https://implan.com/index.php?option=com_content&view=category&id=19

² Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

³ Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

⁴ GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

⁵ Output = Intermediate Inputs + Value Added

In the top ten by employment, Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming is the top employer in the agriculture industry with 677.9 employees. This table also shows the amount of jobs that are created by the agriculture industry in Labette County.

Top 10 Industries Affected by Employment

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	677.9	\$124,419,274
All other crop farming	138.3	\$12,433,861
Grain farming	126.9	\$31,482,643
Veterinary services	109.5	\$6,161,467
Wholesale trade	61.5	\$10,465,412
Support activities for agriculture and forestry	41.9	\$2,613,800
Truck transportation		\$4,445,731
Real estate	24.7	\$3,687,865
Monetary authorities and depository credit intermediation	19.5	\$3,036,621
Dairy cattle and milk production	15.7	\$2,064,688

The Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming industry directly contributes approximately \$124 million to Labette County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

Top 10 Industries Affected by Output

	Total	Total
Sector Description:	Employment	Output
Beef cattle ranching and farming, including feedlots and dual-purpose ranching		
and farming	677.9	\$124,419,274
Grain farming	126.9	\$31,482,643
Oilseed farming	14.6	\$22,424,822
All other crop farming	138.3	\$12,433,861
Wholesale trade	61.5	\$10,465,412
Veterinary services	109.5	\$6,161,467
Farm machinery and equipment manufacturing	9.8	\$5,987,921
Truck transportation	29.6	\$4,445,731
Real estate	24.7	\$3,687,865
Owner-occupied dwellings	0.0	\$3,376,884

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Labette County's economy.

Sector Description: Employment Output Oilseed farming. 14.6 \$22,424,822 Grain farming. 126,9 \$31,482,643 Vegetable and melon farming. 0.3 \$42,199 Tree nut farming. 1.9 \$479,384 Greenhouse, nursery, and floriculture production. 0.4 \$50,994 All other crop farming. 138.3 \$12,433,861 Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming. 677.9 \$124,419,274 Dairy cartle and milk production. 2.3 \$808,242 Animal production, except cattle and poultry and eggs 11.0 \$787,339 Commercial logging. 1.5 \$80,554 Animal production, except cattle and poultry and eggs 11.0 \$787,339 Commercial logging. 1.5 \$80,554 Animal production, except poultry, slaughtering. 10.6 \$1,079,950 Frozen cakes and other pastries manufacturing. 0.7 \$98,055 Farm machinery and equipment manufacturing. 9.8 \$5,987,201 Veterinary services. 10.5 \$0.161,467 <		Total	Total
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All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.